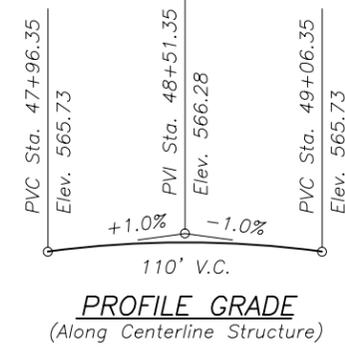
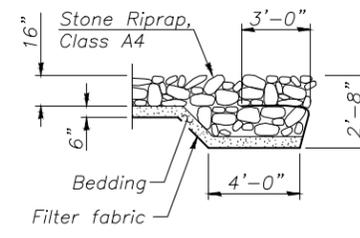
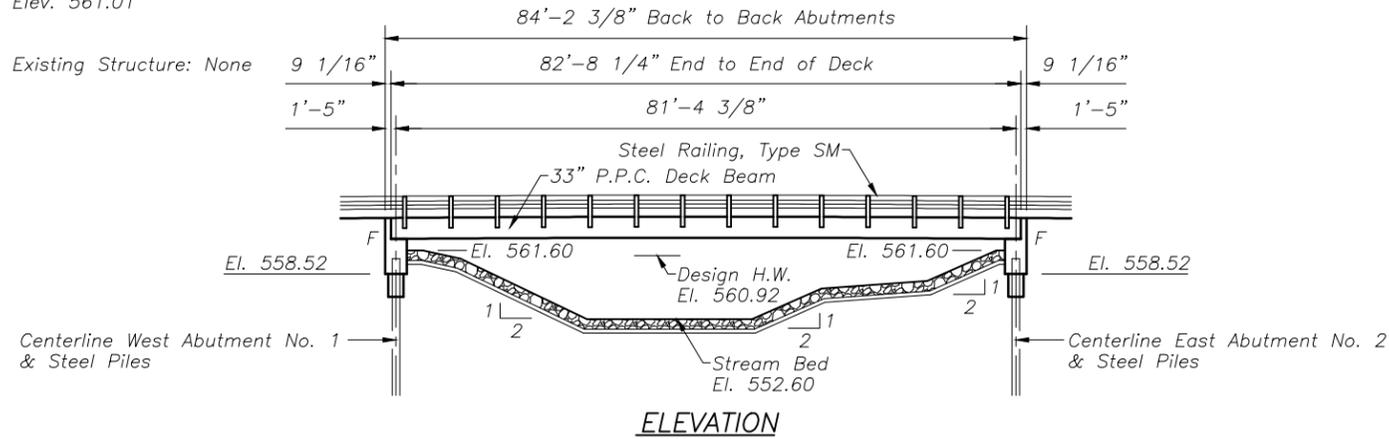


Bench Mark:
Railroad spike in power pole 200'± south of
Whitman Road on west side of Ashley Road.
Elev. 561.01



VALLEY RUN
BUILT 20__ BY
CITY OF MORRIS
STATION 48+51.35
STR. NO. 032-7013 LOADING HL-93

NAME PLATE
See Std. 515001

GENERAL NOTES

Bridge construction shall be in accordance with the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, adopted January 1, 2012, the Illinois Department of Transportation Supplemental and Recurring Special Provisions, adopted January 1, 2012, the special provisions, and these plans.

Reinforcement bars designated (E) shall be epoxy coated.

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the engineer.

The cost for excavation at the abutments shall be considered as included in the contract unit price for Concrete Structures.

INDEX OF SHEETS

- 1 General Plan
- 2 Superstructure Details
- 3-4 PPC Deck Beam Details
- 5 Steel Railing, Type SM
- 6 West Abutment Details
- 7 East Abutment Details
- 8 Pile Details
- 9-10 Soil Boring Sheets

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition

DESIGN STRESSES

Precast units:
f'c = 6,000 psi
f'ci = 5,000 psi
fs' = 270,000 psi (1/2 Dia. Strand)
fs'i = 201,960 psi (1/2 Dia. Strand)
fy = 65,000 psi (Welded wire fabric)
fy = 60,000 psi (Reinf.)
Field units:
f'c = 3,500 psi
fy = 60,000 psi (Reinf.)

LOADING HL-93

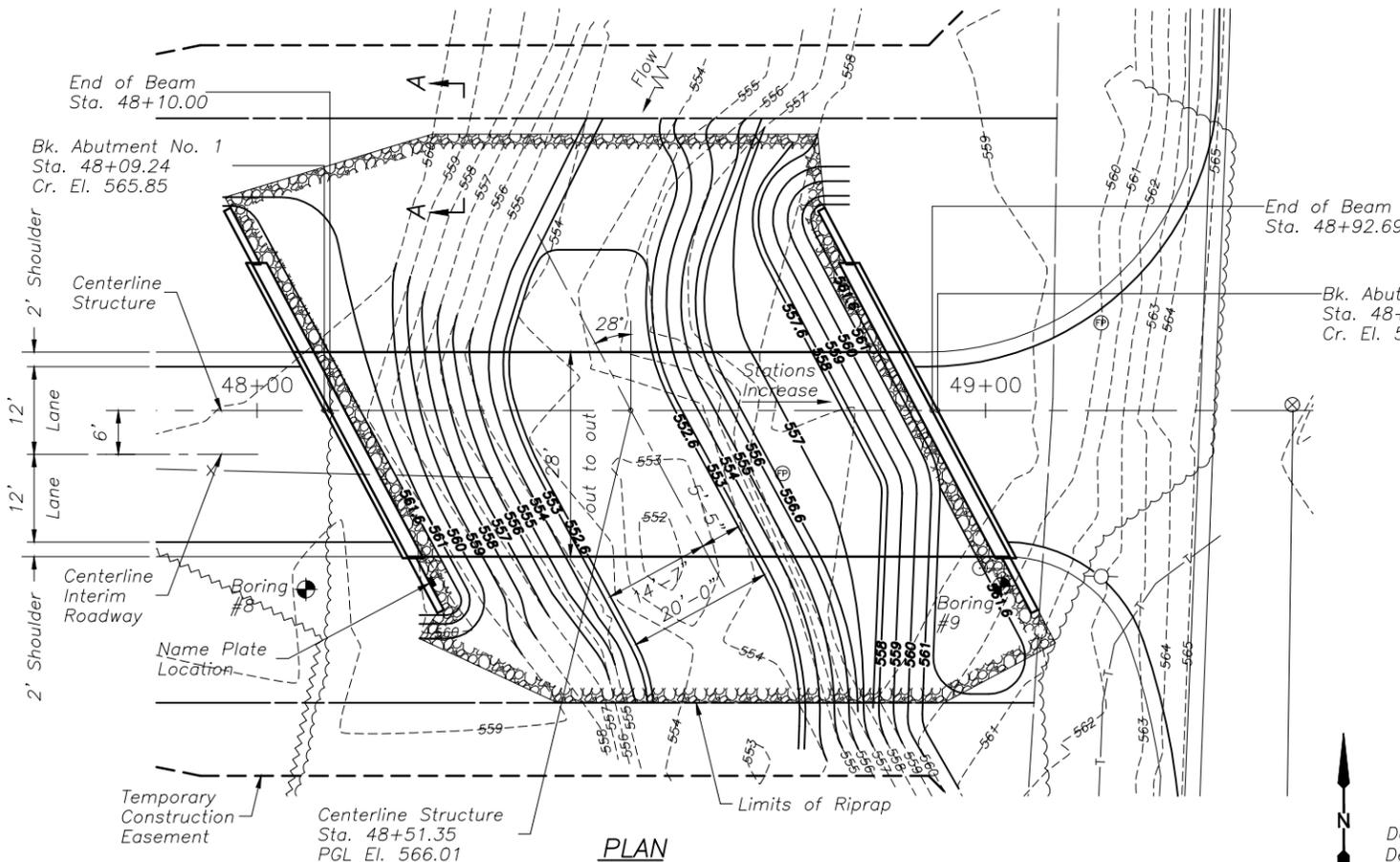
Allow 50#/sq. ft. for future wearing surface.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.056g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.130g
Soil Site Class = C

TOTAL BILL OF MATERIAL

ITEM NO.	ITEM	UNIT	SUPER	SUB	TOTAL
AR 156544	Stone Riprap, Class A4	Sq Yd	--	712	712
AR 801328	Concrete Structures	Cu Yd	--	45.4	45.4
AR 801329	Concrete Encasement	Cu Yd	--	4.8	4.8
AR 801330	Precast Prestressed Concrete Deck Beams (33" Depth)	Sq Ft	2315	--	2315
AR 801331	Reinforcement Bars, Epoxy Coated	Pound	--	3860	3860
AR 801332	Steel Railing, Type SM	Foot	166	--	166
AR 801333	Furnishing Steel Piles HP12x53	Foot	--	372	372
AR 801334	Driving Piles	Foot	--	372	372
AR 801335	Test Pile Steel HP12x53	Each	--	2	2
AR 801336	Name Plates	Each	--	1	1



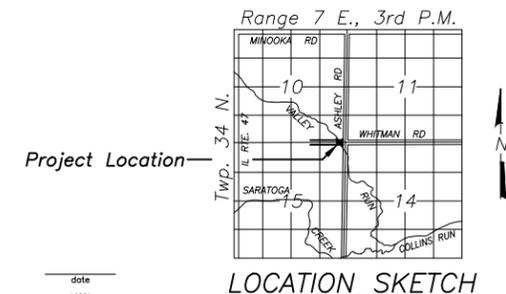
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	E. Abut.
	559.02	559.02

WATERWAY INFORMATION

Drainage Area = 13.8 Sq. Mi. Low Grade Elev. 563.94 @ Sta. 48+06

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Prop.	Headwater El. Prop.
Design	10	933	305	560.3	--	560.2
Base	50	1380	342	560.9	0.1	561.0
Overtopping	100	1560	361	561.2	0.1	561.3
Max. Calc.	500	1990	387	561.6	0.3	561.9



I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO LRFD Bridge Design Specifications".

GENERAL PLAN
WHITMAN ROAD OVER VALLEY RUN
GRUNDY COUNTY
STA. 48+51.35
SN 032-7013

CHAMLIN & ASSOCIATES, INC. © 2012. Drawing Name: H:\A\08\11\002-86\PERU BRIDGE PLANS\001-0PE.dwg Last Modified: Mar 08, 2013 - 2:12pm by marks

LEVEL	BY	DATE	DESCRIPTION
1	MAB	3/8/13	REVISED PER IDA COMMENTS

DATE: 12/12

CHAMLIN & ASSOCIATES

PERU MORRIS ILLINOIS

MORRIS AIRPORT ACCESS ROAD
CITY OF MORRIS, GRUNDY COUNTY, ILLINOIS

GENERAL PLAN
STRUCTURE NO. 032-7013
SHEET NO. 1 OF 10 SHEETS

APPROVED FOR CONSTRUCTION

CURRENT AS OF: 3/8/13

SCALE: AS NOTED SHEET 22

FILE NO.: 1002.86 OF 38